

EXHIBIT B
DATA ITEM DESCRIPTION (DID)

DATA ITEM DESCRIPTION		Form Approved OMB No. 0704-0188 Exp. Date: Jun 30, 1986	
1. TITLE Contractor's Progress, Status and Management Report		2. IDENTIFICATION NUMBER DI-MGMT-80227 (T)	
3. DESCRIPTION/PURPOSE 3.1 The Contractor's Progress, Status and Management Report indicates the progress of work and the status of the program and of the assigned tasks, reports costs, and informs of existing or potential problem areas.			
4. APPROVAL DATE (YYMMDD) 860905	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) N/SPAWAR	6a. DTIC REQUIRED	6b. GIDEP REQUIRED
7. APPLICATION/INTERRELATIONSHIP 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement for this data included in the contract. 7.2 This DID may be applied in any contract and during any program phase. 7.3 This DID supersedes DI-A-2090A, DI-A-3025A, UDI-A-22050B, UDI-A-22052A, UDI-A-23960, DI-A-30024, and DI-A-30606. (cont. on page 2)			
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS	9b. AMSC NUMBER N3947
10. PREPARATION INSTRUCTIONS 10.1 <u>Contract</u> - This data item is generated by the contract which contains a specific and discrete work task to develop this data product. 10.2 <u>Format</u> - This report shall be typewritten on standard size (e.g. 8 1/2" by 11") white paper, and securely stapled. Pages shall be sequentially numbered. All attachments shall be identified and referenced in the text of the report. The report shall be prepared in the contractor's format and shall be legible and suitable for reproduction. 10.3 <u>Content</u> - The report shall include: a. A front cover sheet which includes the contractor's name and address, the contract number, the nomenclature of the system or program, the date of the report, the period covered by the report, the title of the report, either the serial number of the report or the Contract Data Requirements List (CDRL) sequence number, the security classification, and the name of the issuing Government activity; b. Description of the progress made against milestones during the reporting period; c. Results, positive or negative, obtained related to previously-identified problem areas, with conclusions and recommendations; d. Any significant changes to the contractor's organization or method of operation, to the project management network, or to the milestone chart; e. Problem areas affecting technical or scheduling elements, with background and any recommendations for solutions beyond the scope of the contract; f. Problem areas affecting cost elements, with background and any recommendations for solutions beyond the scope of the contract; g. Cost curves showing actual and projected conditions throughout the contract; h. Any cost incurred for the reporting period and total contractual expenditures as of reporting date; i. Person-hours expended for the reporting period and cumulatively for the contract; j. Any trips and significant results; (cont. on page 2)			

7. APPLICATION/INTERRELATIONSHIP (Cont'd)

7.4 Paragraphs 10.3.f, 10.3.g, and 10.3.h herein should be tailored on DD Form 1423 when such cost data is already submitted through a sophisticated cost reporting system under the contract.

10. PREPARATION INSTRUCTIONS (Cont'd)

- ~~k. Record of all significant telephone calls and any commitments made by telephone;~~
- ~~l. Summary of Engineering Change Proposal (ECP) status, including identification of proposed ECPs, approved ECPs, and implemented ECPs;~~
- m. Contract schedule status;
- n. Plans for activities during the following reporting period;
- o. Name and telephone number of preparer of the report;
- p. Appendixes for any necessary tables, references, photographs, illustrations, and charts.

DATA ITEM DESCRIPTION

Title: COMMERCIAL OFF-THE-SHELF (COTS) MANUALS AND ASSOCIATED SUPPLEMENTAL DATA

Number: DI-TMSS-80527B

AMSC Number: 7595

DTIC Applicable: No

Office of Primary Responsibility: TM

Approval Date: 20061017

Limitation: No

GIDEP Applicable: No

Applicable Forms: None

Use/relationship: Commercial Off-the-Shelf Manuals may be used as is or with supplementation to support COTS equipment used by DOD. This DID is used to:

- a. Acquire sample COTS manuals for evaluation.
- b. Acquire COTS manuals which have been evaluated and found to be acceptable.
- c. Acquire associated supplemental data, if required.

This DID contains format, content, and intended used information for the data deliverable(s) resulting from the work described in MIL-PRF-32216.

This DID supersedes DI-TMSS-80527A, dated 21 May 97.

Requirements:

1. Content. The manual shall contain all technical information on the assembly, installation, operation, parts, and maintenance of commercial equipment.
2. Evaluation. The manual shall be evaluated using the criteria found in MIL-PRF-32216.
3. Supplementation. The manual may be supplemented with additional data to comply with contract. Supplemental data shall be prepared in accordance with MIL-PRF-32216.
4. Format. The basic manual shall be in the contractor's format. Supplemental data shall be in the format specified by the contracting activity.
5. Digital files. Interactive Electronic Technical Manuals (IETMs) or PDF are preferred for electronic COTS manuals.
6. PDF Files. PDF files shall be searchable, capable of having links added, and have fonts embedded. A list of preferred fonts is provided in MIL-PRF-32216.
7. IETMs. IETMs shall meet the general style and format and user interface requirements in MIL-PRF-87268 or MIL-STD-40051-1 (Army only).
8. Paper manuals. If paper manuals are acquired, the data shall be clearly legible and on paper of sufficient quality for long term use.

DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0185

1. TITLE Computer Software Product End Items		2. IDENTIFICATION NUMBER DI-MCCR-80700	
3. DESCRIPTION / PURPOSE 3.1 The Computer Software Product End Item provides data formatted for review or maintenance to assure significant milestones are met. 3.2 Data produced under this requirement will be used during the life cycle for development, operation and maintenance.			
4. APPROVAL DATE (YYMMDD) 881026	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) A/MICOM	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. 7.2 These requirements apply to all software product end items which are acquired for Department of Defense use. 7.3 This DID supersedes DI-E-1125.			
8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER AMSC A4561	
PREPARATION INSTRUCTIONS 10.1 <u>Content</u> . The specific documentation/software required and the form in which they shall be furnished (documentation/source/object/executable) shall be as delineated on the Contract Data Requirements List ((CDRL), DD Form 1423). 10.2 <u>Media</u> . The specific media on which the documentation/software shall be furnished (e.g., 9 track magnetic tape, tape cassette, floppy disk) shall be as specified on the CDRL. 10.3 <u>Format</u> . The format and method used to store and retrieve the documentation/software using the above media and all specific computer compatibility requirements shall be as specified on the CDRL.			
11. DISTRIBUTION STATEMENT <u>DISTRIBUTION STATEMENT A</u> : Approved for public release; distribution unlimited.			

DATA ITEM DESCRIPTION		Form Approved OMB No. 0704-0188	
<p>The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.</p>			
1. TITLE		2. IDENTIFICATION NUMBER	
Scientific and Technical Reports		DI-MISC-80711A(T)	
<p>3. DESCRIPTION/PURPOSE</p> <p>3.1 Scientific and Technical Reports document and disseminate the precise nature and results of analytical studies, research, development, test and evaluation (RDT&E) on an assigned task(s) to the analytical, scientific, technical and management community. Scientific and Technical Reports, may be definitive for the subject presented, exploratory in nature, or an evaluation of critical subsystem or of technical problems.</p>			
4. APPROVAL DATE (YYYYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
20000121	L/DD	X	
<p>7. APPLICATION/INTERRELATIONSHIP</p> <p>7.1 This DID contains the format requirements and preparation instructions for the information product generated by the specific and discrete task requirement as delineated in the contract.</p> <p>7.2 This DID is applicable to the elements, organization and design of technical publications.</p> <p>7.3 This DID supersedes UDI-S-23272C, DI-S-4057, DI-S-3591A, and DI-MISC-80711.</p> <p>7.4 Defense Technical Information Center (DTIC), 8725 John J. Kingman Rd., Ste. 0944, Ft. Belvoir, VA 22060-6218</p>			
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS	9b. AMSC NUMBER
		SF 298	L7382
<p>10. PREPARATION INSTRUCTIONS</p> <p>10.1 <u>Reference document.</u> The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.</p> <p>10.2 Document format shall be in accordance with ANSI/NISO Z39.18 Scientific and Technical Reports -- Elements, Organization, and Design.</p> <p>10.3 Document content shall be clearly written, describe accomplishments and other facts adequately with no technical errors, and be acceptable for release. If marked unclassified, unlimited, they should be accompanied by a letter certifying that the documents have been cleared for public release and sale, to include foreign nationals.</p>			
<p>11. DISTRIBUTION STATEMENT</p> <p>Distribution Statement A: Approved for public release; distribution is unlimited.</p> <p>D</p>			

DATA ITEM DESCRIPTION

Title: SYSTEM/SUBSYSTEM DESIGN DESCRIPTION (SSDD)

Number: DI-IPSC-81432A

Approval Date: 10 August 1999

AMSC Number: N7351

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: N/EC

Applicable Forms: N/A

Use, Relationships:

The System/Subsystem Design Description (SSDD) describes the system- or subsystem-wide design and the architectural design of a system or subsystem. The SSDD may be supplemented by Interface Design Descriptions (IDDs) (DI-IPSC-81436A) and Database Design Descriptions (DBDDs) (DI-IPSC-81437A) as described below.

The SSDD, with it associated IDD and DBDDs, is used as the basis for further system development. Throughout this Data Item Description (DID), the term "system" may be interpreted to mean "subsystem" as applicable. The resulting document should be titled System Design Description or Subsystem Design Description (SSDD).

This DID contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract.

This DID is used when the developer is tasked to define and record the design of a system or subsystem.

Design pertaining to interfaces may be presented in the SSDD or in IDDs. Design pertaining to databases may be presented in the SSDD or DBDDs.

The Contract Data Requirements List (CDRL)(DD 1423) will specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software); may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

This DID supersedes DI-IPSC-81432.

Requirements:

1. Reference documents. None.
2. General instructions.

a. Automated techniques. Use of automated techniques is encouraged. The term “document” in this DID means a collection of data regardless of its medium.

b. Alternate presentation styles. Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.

3. Format. Following are the format requirements.

a. Title page or identifier. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

b. Table of contents. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.

c. Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.

d. Response to tailoring instructions. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by “This paragraph has been tailored out.” For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.

e. Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.

f. Standard data descriptions. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.

g. Substitution of existing documents. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.

4. Content. The numbers shown designate the paragraph numbers to be used in the document.

1. Scope. This section shall be divided into the following paragraphs.

1.1 Identification. This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

1.2 System overview. This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

1.3 Document overview. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

2. Referenced documents. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not available through normal Government stocking activities.

3. System-wide design decisions. This section shall be divided into paragraphs as needed to present system-wide design decisions, that is, decisions about the system's behavioral design (how it will behave, from a user's point of view, in meeting its requirements, ignoring internal implementation) and other decisions affecting the selection and design of system components. If all such decisions are explicit in the requirements or are deferred to the design of the system components, this section shall so state. Design decisions that respond to requirements designated critical, such as those for safety, security, or privacy, shall be placed in separate subparagraphs. If a design decision depends upon system states or modes, this dependency shall be indicated. Design conventions needed to understand the design shall be presented or referenced. Examples of system-wide design decisions are the following:

a. Design decisions regarding inputs the system will accept and outputs it will produce, including interfaces with other systems, configuration items, and users (4.3.x of this DID identifies topics to be considered in this description). If part or all of this information is given in Interface Design Descriptions (IDDs), they may be referenced.

b. Design decisions on system behavior in response to each input or condition, including actions the system will perform, response times and other performance characteristics, description of physical systems modeled, selected equations/algorithms/ rules, and handling of unallowed inputs or conditions.

c. Design decisions on how system databases/data files will appear to the user (4.3.x of this DID identifies topics to be considered in this description). If part or all of this information is given in Database Design Descriptions (DBDDs), they may be referenced.

d. Selected approach to meeting safety, security, and privacy requirements.

e. Design and construction choices for hardware or hardware-software systems, such as physical size, color, shape, mass, materials, and markings.

f. Other system-wide design decisions made in response to requirements, such as selected approach to providing required flexibility, availability, and maintainability.

4. System architectural design. This section shall be divided into the following paragraphs to describe the system architectural design. If part or all of the design depends upon system states or modes, this dependency shall be indicated. If design information falls into more than one paragraph, it may be presented once and referenced from the other paragraphs. Design conventions needed to understand the design shall be presented or referenced.

Note: For brevity, this section is written in terms of organizing a system directly into Hardware Configuration Items (HWCIs), Computer Software Configuration Items (CSCIs), and manual operations, but should be interpreted to cover organizing a system into subsystems, organizing a subsystem into HWCIs, CSCIs, and manual operations, or other variations as appropriate.

4.1 System components. This paragraph shall:

a. Identify the components of the system (HWCIs, CSCIs, and manual operations). Each component shall be assigned a project-unique identifier. Note: a database may be treated as a CSCI or as part of a CSCI.

b. Show the static (such as “consists of”) relationship(s) of the components. Multiple relationships may be presented, depending on the selected design methodology.

c. State the purpose of each component and identify the system requirements and system-wide design decisions allocated to it. (Alternatively, the allocation of requirements may be provided in 5.a.)

d. Identify each component’s development status/type, if known (such as new development, existing component to be reused as is, existing design to be reused as is, existing design or component to be reengineered, component to be developed for reuse, component planned for Build N, etc.) For existing design or components, the description shall provide identifying information, such as name, version, documentation references, location, etc.

e. For each computer system or other aggregate of computer hardware resources identified for use in the system, describe its computer hardware resources (such as processors, memory, input/output devices, auxiliary storage, and communications/network equipment). Each description shall, as applicable, identify the configuration items that will use the resource, describe the allocation of resource utilization to each CSCI that will use the resource (for example, 20% of the resource’s capacity allocated to CSCI 1, 30% to CSCI 2), describe the conditions under which utilization will be measured, and describe the characteristics of the resource:

1) Descriptions of computer processors shall include, as applicable, manufacturer name and model number, processor speed/capacity, identification of instruction set architecture, applicable compiler(s), word size (number of bits in each computer word), character set standard (such as ASCII, EBCDIC), and interrupt capabilities.

2) Descriptions of memory shall include, as applicable, manufacturer name and model number and memory size, type, speed, and configuration (such as 256K cache memory, 16MB RAM (4MB x 4)).

3) Descriptions of input/output devices shall include, as applicable, manufacturer name and model number, type of device, and device speed/capacity.

4) Descriptions of auxiliary storage shall include, as applicable, manufacturer name and model number, type of storage, amount of installed storage, and storage speed.

5) Descriptions of communications/network equipment, such as modems, network interface cards, hubs, gateways, cabling, high speed data lines, or aggregates of these or other components, shall include, as applicable, manufacturer name and model number, data transfer rates/capacities, network topologies, transmission techniques, and protocols used.

6) Each description shall also include, as applicable, growth capabilities, diagnostic capabilities, and any additional hardware capabilities relevant to the description.

f. Present a specification tree for the system, that is, a diagram that identifies and shows the relationships among the planned specifications for the system components.

4.2 Concept of execution. This paragraph shall describe the concept of execution among the system components. It shall include diagrams and descriptions showing the dynamic relationship of the components, that is, how they will interact during system assembly, storage, deployment, and operation, including, as applicable, flow of execution control, data flow, dynamically controlled sequencing, state transition diagrams, timing diagrams, priorities among components, handling of interrupts, timing/sequencing relationships, exception handling, concurrent execution, dynamic allocation/deallocation, dynamic creation/deletion of objects, processes, tasks, assembly, storage, deployment, and other aspects of dynamic behavior.

4.3 Interface design. This paragraph shall be divided into the following subparagraphs to describe the interface characteristics of the system components. It shall include both interfaces among the components and their interfaces with external entities such as other systems, configuration items, and users. Note: There is no requirement for these interfaces to be completely designed at this level; this paragraph is provided to allow the recording of interface design decisions made as part of system architectural design. If part or all of this information is contained in Interface Design Descriptions (IDDs) or elsewhere, these sources may be referenced.

4.3.1 Interface identification and diagrams. This paragraph shall state the project-unique identifier assigned to each interface and shall identify the interfacing entities (systems,

configuration items, users, etc.) by name, number, version, and documentation references, as applicable. The identification shall state which entities have fixed interface characteristics (and therefore impose interface requirements on interfacing entities) and which are being developed or modified (thus having interface requirements imposed on them). One or more interface diagrams shall be provided, as appropriate, to depict the interfaces.

4.3.x (Project-unique identifier of interface). This paragraph (beginning with 4.3.2) shall identify an interface by project-unique identifier, shall briefly identify the interfacing entities, and shall be divided into subparagraphs as needed to describe the interface characteristics of one or both of the interfacing entities. If a given interfacing entity is not covered by this SSDD (for example, an external system) but its interface characteristics need to be mentioned to describe interfacing entities that are, these characteristics shall be stated as assumptions or as “When [the entity not covered] does this, [the entity that is covered] will...” This paragraph may reference other documents (such as data dictionaries, standards for protocols, and standards for user interfaces) in place of stating the information here. The design description shall include the following, as applicable, presented in any order suited to the information to be provided, and shall note any differences in these characteristics from the point of view of the interfacing entities (such as different expectations about the size, frequency, or other characteristics of data elements):

- a. Priority assigned to the interface by the interfacing entity(ies)
- b. Type of interface (such as real-time data transfer, storage-and-retrieval of data, etc.) to be implemented
- c. Characteristics of individual data elements that the interfacing entity(ies) will provide, store, send, access, receive, etc., such as:

- 1) Names/identifiers

- a) Project-unique identifier
 - b) Non-technical (natural-language) name
 - c) DoD standard data element name
 - d) Technical name (e.g., variable or field name in code or database)
 - e) Abbreviation or synonymous names

- 2) Data type (alphanumeric, integer, etc.)

- 3) Size and format (such as length and punctuation of a character string)

- 4) Units of measurement (such as meters, dollars, nanoseconds)

- 5) Range or enumeration of possible values (such as 0-99)
- 6) Accuracy (how correct) and precision (number of significant digits)
- 7) Priority, timing, frequency, volume, sequencing, and other constraints, such as whether the data element may be updated and whether business rules apply
- 8) Security and privacy constraints
- 9) Sources (setting/sending entities) and recipients (using/receiving entities)

d. Characteristics of data element assemblies (records, messages, files, arrays, displays, reports, etc.) that the interfacing entity (ies) will provide, store, send, access, receive, etc., such as:

- 1) Names/identifiers
 - a) Project-unique identifier
 - b) Non-technical (natural language) name
 - c) Technical name (e.g., record or data structure name in code or database)
 - d) Abbreviations or synonymous names
- 2) Data elements in the assembly and their structure (number, order, grouping)
- 3) Medium (such as disk) and structure of data elements/assemblies on the medium
- 4) Visual and auditory characteristics of displays and other outputs (such as colors, layouts, fonts, icons and other display elements, beeps, lights)
- 5) Relationships among assemblies, such as sorting/access characteristics
- 6) Priority, timing, frequency, volume, sequencing, and other constraints, such as whether the assembly may be updated and whether business rules apply
- 7) Security and privacy constraints
- 8) Sources (setting/sending entities) and recipients (using/receiving entities)

e. Characteristics of communication methods that the interfacing entity (ies) will use for the interface such as:

- 1) Project-unique identifier(s)
- 2) Communication links/bands/frequencies/media and their characteristics
- 3) Message formatting
- 4) Flow control (such as sequence numbering and buffer allocation)
- 5) Data transfer rate, whether periodic/aperiodic, and interval between transfers
- 6) Routing, addressing, and naming conventions
- 7) Transmission services, including priority and grade
- 8) Safety/security/privacy considerations, such as encryption, user authentication, compartmentalization, and auditing

f. Characteristics of protocols that the interfacing entity(ies) will use for the interface, such as:

- 1) Project-unique identifier(s)
- 2) Priority/layer of the protocol
- 3) Packeting, including fragmentation and reassembly, routing, and addressing
- 4) Legality checks, error control, and recovery procedures
- 5) Synchronization, including connection establishment, maintenance, termination
- 6) Status, identification, and any other reporting features

g. Other characteristics, such as physical compatibility of the interfacing entity(ies) (dimensions, tolerances, loads, voltages, plug compatibility, etc.)

5. Requirements traceability. This section shall contain:

- a. Traceability from each system component identified in this SSDD to the system requirements allocated to it. (Alternatively, this traceability may be provided in 4.1.)
- b. Traceability from each system requirement to the system components to which it is allocated.

6. Notes. This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an

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alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

A. Appendices. Appendices may be used to provide information published separately for convenience in document maintenance (e.g., charts classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).

END OF DI-IPSC-81432A

DATA ITEM DESCRIPTION

Title: SOFTWARE USER MANUAL (SUM)

Number: DI-IPSC-81443A

Approval Date: 20000111

AMSC Number: N7378

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: N/SPAWAR

Applicable Forms: N/A

Use, Relationships:

The Software User Manual (SUM) tells a hands-on software user how to install and use a Computer Software Configuration Item (CSCI), a group of related CSCI's, or a software system or subsystem. It may also cover a particular aspect of software operation, such as instructions for a particular position or task.

The SUM is developed for software that is run by the user and has a user interface requiring on-line user input or interpretation of displayed output. If the software is embedded in a hardware-software system, user manuals or operating procedures for that system may make separate SUMs unnecessary.

This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by specific and discrete task requirements as delineated in the contract.

This DID is used when the developer is tasked to identify and record information needed by hands-on users of software.

The SUM is an alternative to the Software Input/Output Manual (SIOM) (DI-IPSC-81445A) and Software Center Operator Manual (SCOM) (DI-IPSC-81444A).

This DID supersedes DI-IPSC-81443.

Requirements:

1. Reference documents. None.

2. General instructions.

a. Automated techniques. Use of automated techniques is encouraged. The term "document" in this DID means a collection of data regardless of its medium.

b. Alternate presentation styles. Diagrams, tables, matrices, and other presentation styles are acceptable substitutes for text when data required by this DID can be made more readable using these styles.

3. Format. Following are the format requirements.

The specification shall be in contractor format unless otherwise specified on the Contract Data Requirements List (CDRL)(DD 1423). The CDRL should specify whether deliverable data are to be delivered on paper or electronic media; are to be in a given electronic form (such as ASCII, CALS, or compatible with a specified word processor or other support software); may be delivered in developer format rather than in the format specified herein; and may reside in a computer-aided software engineering (CASE) or other automated tool rather than in the form of a traditional document.

4. Content. The specification shall contain the following:

a. Title page or identifier. The document shall include a title page containing, as applicable: document number; volume number; version/revision indicator; security markings or other restrictions on the handling of the document; date; document title; name, abbreviation, and any other identifier for the system, subsystem, or item to which the document applies; contract number; CDRL item number; organization for which the document has been prepared; name and address of the preparing organization; and distribution statement. For data in a database or other alternative form, this information shall be included on external and internal labels or by equivalent identification methods.

b. Table of contents and index. The document shall contain a table of contents providing the number, title, and page number of each titled paragraph, figure, table, and appendix, and an index providing an alphabetic listing of key terms and concepts covered in the document and the pages or paragraphs in which the terms or concepts are covered. For data in a database or other alternative form, this information shall consist of an internal or external table of contents containing pointers to, or instructions for accessing, each paragraph, figure, table, and appendix or their equivalents.

c. Page numbering/labeling. Each page shall contain a unique page number and display the document number, including version, volume, and date, as applicable. For data in a database or other alternative form, files, screens, or other entities shall be assigned names or numbers in such a way that desired data can be indexed and accessed.

d. Response to tailoring instructions. If a paragraph is tailored out of this DID, the resulting document shall contain the corresponding paragraph number and title, followed by "This paragraph has been tailored out." For data in a database or other alternative form, this representation need occur only in the table of contents or equivalent.

e. Multiple paragraphs and subparagraphs. Any section, paragraph, or subparagraph in this DID may be written as multiple paragraphs or subparagraphs to enhance readability.

f. Standard data descriptions. If a data description required by this DID has been published in a standard data element dictionary specified in the contract, reference to an entry in that dictionary is preferred over including the description itself.

g. Substitution of existing documents. Commercial or other existing documents may be substituted for all or part of the document if they contain the required data.

The numbers shown designate the paragraph numbers to be used in the document.

1. Scope. This section shall be divided into the following paragraphs.

1.1 Identification. This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

1.2 System overview. This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

1.3 Document overview. This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

2. Referenced documents. This section shall list the number, title, revision, and date of all documents referenced in this document. This section shall also identify the source for all documents not available through normal Government stocking activities.

3. Software summary. This section shall be divided into the following paragraphs.

3.1 Software application. This paragraph shall provide a brief description of the intended uses of the software. Capabilities, operating improvements, and benefits expected from its use shall be described.

3.2 Software inventory. This paragraph shall identify all software files, including databases and data files, that must be installed for the software to operate. The identification shall include security and privacy considerations for each file and identification of the software necessary to continue or resume operation in case of an emergency.

3.3 Software environment. This paragraph shall identify the hardware, software, manual operations, and other resources needed for a user to install and run the software. Included, as applicable, shall be identification of:

a. Computer equipment that must be present, including amount of memory needed, amount of auxiliary storage needed, and peripheral equipment such as printers and other input/output devices

b. Communications equipment that must be present

c. Other software that must be present, such as operating systems, databases, data files, utilities, and other supporting systems

d. Forms, procedures, or other manual operations that must be present

e. Other facilities, equipment, or resources that must be present

3.4 Software organization and overview of operation. This paragraph shall provide a brief description of the organization and operation of the software from the user's point of view. The description shall include, as applicable:

a. Logical components of the software, from the user's point of view, and an overview of the purpose/operation of each component

b. Performance characteristics that can be expected by the user, such as:

1) Types, volumes, rate of inputs accepted

2) Types, volume, accuracy, rate of outputs that the software can produce

3) Typical response time and factors that affect it

4) Typical processing time and factors that affect it

5) Limitations, such as number of events that can be tracked

6) Error rate that can be expected

7) Reliability that can be expected

c. Relationship of the functions performed by the software with interfacing systems, organizations, or positions

d. Supervisory controls that can be implemented (such as passwords) to manage the software

3.5 Contingencies and alternate states and modes of operation. This paragraph shall explain differences in what the user will be able to do with the software at times of emergency and in various states and modes of operation, if applicable.

3.6 Security and privacy. This paragraph shall contain an overview of the security and privacy considerations associated with the software. A warning shall be included regarding making unauthorized copies of software or documents, if applicable.

3.7 Assistance and problem reporting. This paragraph shall identify points of contact and procedures to be followed to obtain assistance and report problems encountered in using the software.

4. Access to the software. This section shall contain step-by-step procedures oriented to the first time/occasional user. Enough detail shall be presented so that the user can reliably access the software before learning the details of its functional capabilities. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.

4.1 First-time user of the software. This paragraph shall be divided into the following subparagraphs.

4.1.1 Equipment familiarization. This paragraph shall describe the following as appropriate:

- a. Procedures for turning on power and making adjustments
- b. Dimensions and capabilities of the visual display screen
- c. Appearance of the cursor, how to identify an active cursor if more than one cursor can appear, how to position a cursor, and how to use a cursor
- d. Keyboard layout and role of different types of keys and pointing devices
- e. Procedures for turning power off if special sequencing of operations is needed

4.1.2 Access control. This paragraph shall present an overview of the access and security features of the software that are visible to the user. The following items shall be included, as applicable:

- a. How and from whom to obtain a password
- b. How to add, delete, or change passwords under user control
- c. Security and privacy considerations pertaining to the storage and marking of output reports and other media that the user will generate

4.1.3 Installation and setup. This paragraph shall describe any procedures that the user must perform to be identified or authorized to access or install software on the equipment, to perform the installation, to configure the software, to delete or overwrite former files or data, and to enter parameters for software operation.

4.2 Initiating a session. This paragraph shall provide step-by-step procedures for beginning work, including any options available. A checklist for problem determination shall be included in case difficulties are encountered.

4.3 Stopping and suspending work. This paragraph shall describe how the user can cease or interrupt use of the software and how to determine whether normal termination or cessation has occurred.

5. Processing reference guide. This section shall provide the user with procedures for using the software. If procedures are complicated or extensive, additional Sections 6, 7, ... may be added in the same paragraph structure as this section and with titles meaningful to the sections selected. The organization of the document will depend on the characteristics of the software being documented. For example, one approach is to base the sections on the organizations in which users work, their assigned positions, their work sites, or the tasks they must perform. For other software, it may be more appropriate to have Section 5 be a guide to menus, Section 6 be a guide to the command language used, and Section 7 be a guide to functions. Detailed procedures are intended to be presented in subparagraphs of paragraph 5.3. Depending on the design of the software, the subparagraphs might be organized on a function-by-function, menu-by-menu, transaction-by-transaction, or other basis. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.

5.1 Capabilities. This paragraph shall briefly describe the interrelationships of the transactions, menus, functions, or other processes in order to provide an overview of the use of the software.

5.2 Conventions. This paragraph shall describe any conventions used by the software, such as the use of colors in displays, the use of audible alarms, the use of abbreviated vocabulary, and the use of rules for assigning names or codes.

5.3 Processing procedures. This paragraph shall explain the organization of subsequent paragraphs, e.g., by function, by menu, by screen. Any necessary order in which procedures must be accomplished shall be described.

5.3.x (Aspect of software use). The title of this paragraph shall identify the function, menu, transaction, or other process being described. This paragraph shall describe and give options and examples, as applicable, of menus, graphical icons, data entry forms, user inputs, inputs from other software or hardware that may affect the software's interface with the user, outputs, diagnostic or error messages or alarms, and help facilities that can provide on-line descriptive or tutorial information. The format for presenting this information can be adapted to the particular characteristics of the software, but a consistent style of presentation shall be used, i.e., the descriptions of menus shall be consistent, the descriptions of transactions shall be consistent among themselves.

5.4 Related processing. This paragraph shall identify and describe any related batch, offline, or background processing performed by the software that is not invoked directly by the user and is not described in paragraph 5.3. Any user responsibilities to support this processing shall be specified.

5.5 Data backup. This paragraph shall describe procedures for creating and retaining backup data that can be used to replace primary copies of data in event of errors, defects, malfunctions, or accidents.

5.6 Recovery from errors, malfunctions, and emergencies. This paragraph shall present detailed procedures for restart or recovery from errors or malfunctions occurring during processing and for ensuring continuity of operations in the event of emergencies.

5.7 Messages. This paragraph shall list, or refer to an appendix that lists, all error messages, diagnostic messages, and information messages that can occur while accomplishing any of the user's functions. The meaning of each message and the action that should be taken after each such message shall be identified and described.

5.8 Quick-reference guide. If appropriate to the software, this paragraph shall provide or reference a quick-reference card or page for using the software. This quick-reference guide shall summarize, as applicable, frequently used function keys, control sequences, formats, commands, or other aspects of software use.

6. Notes. This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document. If Section 5 has been expanded into section(s) 6, ..., this section shall be numbered as the next section following section n.

A. Appendices. Appendices may be used to provide information published separately for convenience in document maintenance (e.g., charts classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).

END OF DI-IPSC-81443A.

DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0166

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0166), Washington, DC 20503

1. TITLE REPORT, RECORD OF MEETING/MINUTES		2. IDENTIFICATION NUMBER DI-ADMN-81505	
3. DESCRIPTION/PURPOSE The report is a record of the proceedings of any specified meeting. The Meeting Minutes will be used by appropriate government and contractor personnel as a record of the deliberations and actions resulting from meetings related to performance of work under a contract.			
4. APPROVAL DATE (YYMMDD) 951120	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) N/PMS400G35	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
7. APPLICATION/INTERRELATIONSHIP 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. 7.2 This data item can be used for any Programs/Projects requiring formal documentation of meetings of any type, i.e., audits, design reviews, etc. 7.3 This data item may be used in conjunction with "Agenda, Conference". (Continued on Page 2)			
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS	9b. AMSC NUMBER N7175
10. PREPARATION INSTRUCTIONS 10.1 <u>Format</u> . The report shall be presented in contractor's format. 10.2 <u>Content</u> . The report shall contain a title page which specifies the following: a. Date of report/meeting. b. Title - Type of meeting (study contract, audit, design review, etc.). c. Title of Program/Project. d. System/equipment identification and number. e. Contract number and/or procurement request number. f. Signature(s) - contractor (supporting activity) Project Manager or designated representative. 10.2.1 The report/minutes shall include, the following sections: 10.2.1.1 An introduction which shall include: (Continued on Page 2)			
11. DISTRIBUTION STATEMENT Distribution Statement A. Approved for public release; distribution is unlimited.			

Block 7, Application/Interrelationship (Continued)

7.4 This DID supercedes UDI-A-23083A.

Block 10, Preparation Instructions (Continued)

- a. Statement relating to the purpose/objective of the meeting.
- b. The original agenda/revisions thereto. (This may be accomplished by reference to attachment/enclosure)

10.2.1.2 Administrative data which shall include:

- a. Date and location of the meeting.
- b. Agency under whose direction the meeting was convened.
- c. Name and title of the chairman or co-chairmen.
- d. Name and title of persons attending.

10.2.1.3 Information covered during the meeting, including as appropriate, such items as:

- a. A description and/or listing of the material and documentation, if any, discussed/reviewed during the meeting.
- b. Specific statements relating to changes, deletions, modifications, etc., discussed/reviewed during the meeting, including:
 - (1) A description of the change/modification required.
 - (2) The reason for the change/modification.
 - (3) The agency responsible for preparing change proposals, if required, necessary to effect the change/modification.

10.3 Each item discussed/reviewed during the meeting shall be presented in the following order:

10.3.1 Item. A brief statement identifying the item or problem.

10.3.2 Discussion. A summary of pertinent information associated with the item.

Block 10, Preparation Instructions (Continued)

10.3.3 Recommendations. A list of both the Project/Program Manager's and the contractor's recommendations.

10.3.4 Action. A brief statement of agreements reached, action(s) required by the Program/Project Manager or the contractor, identity of the personnel or activity assigned responsibility for taking and/or coordinating required actions, contractual action, if required, and all key dates.

10.4 Media Requirements. Unless otherwise stated on the Contract Data Requirements List (DD Form 1423); the report/minutes shall be type-written on 8"x 10 1/2" white paper. Charts, graphs, drawings, lists, sketches may be included, if necessary, to support or clarify the text of the report/minutes. Oversize material shall be one-way foldouts. All material presented shall be sufficiently clear and sharp for further reproduction if required. All pages and supporting material shall be securely bound together.